

DATA IN SYNCH

SYNC YOUR DATA SYNC YOUR SUCCESS

Benefits

- Protect your data, sync disaster recovery sites
- Migrate data to heterogeneous database in a confident way
- Improve business value, sync operational data store
- Balance system load, sync system replicas for reporting
- Build a data lake, collect data from heterogeneous databases and store it a single source of truth
- Build new replica, replicate your data consistently

Overview

DataInSynch (DIS) is high speed, reliable and web-based solution to compare and repair data. It provides fast, easy and reliable tool to detect data variations across heterogeneous databases. It verifies similarities and fixes dissimilarities online without interrupting ongoing operations.

It is utilized to compare and maintain data outside database engine to avoid any performance impacts. It is vital to assure data integrity in data integration and data replication solution among Oracle, MySQL, DB2 and MS SQL Server.

Simple Architecture

Simple architecture is granted for rapid installation. It assures hi-speed and reliable performance to verify and repair data.

This architecture consists of:

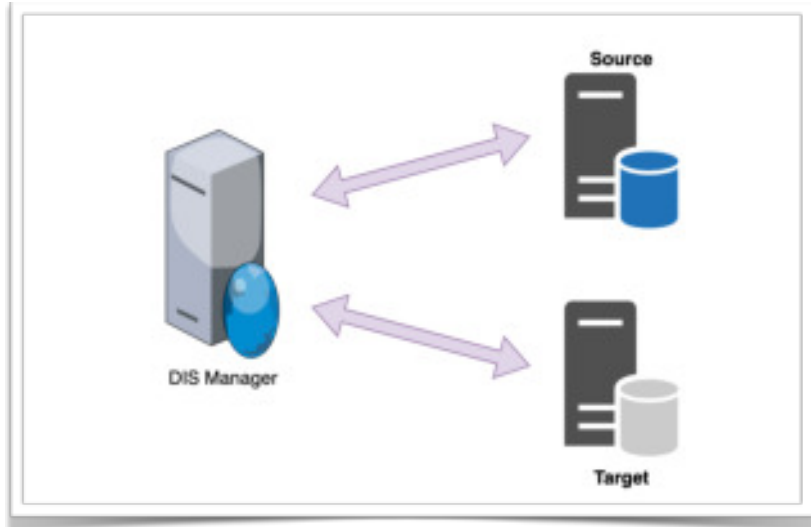
Application Server: It is a web base for web application. Web application is user interface to define agents; select tables, columns and rows; execute verification jobs; monitor verify processing and display verification results. It performs all verifications and fixing processes without any load on source or target databases. It stores all configurations, definitions and verifications results.

Source Database: It stores source tables to be verified. Required data is cached to application server to avoid any performance degradation on running operations.

Target Database: It stores target tables to be verified. Required data is cached to application server to avoid any performance degradation on running operations.

Features

- Simplifying Architecture
- Testing Databases Connectivity
- Comparing Pairs Validation
- Utilizing Fixing Dissimilarity Configuration
- Utilizing Store Results Options
- Highlighting Dissimilar Values
- Central Monitoring Page
- Logging Execution Steps
- Auto Purging Archived Data
- Emailing Execution Results
- Sync Heterogeneous Databases
- Hi-speed Comparing and Repairing
- Online Dissimilarity Fixing
- Multiple Repairing Methods
- Several User Access Roles
- Selective Rows and Columns
- Comparing Outside Database
- Auto-executed Verifications
- Email Verification Results
- Simple, Fast and Reliable
- Display Result Details
- Saving Execution history
- Comparing Massive amount of Data
- Web based application



Features

Definitions Fast Track: Enabling user to define comparing pairs, jobs and schedule them to run automatically for thousands of tables in a SINGLE CLICK. This feature is available only for ENTERPRISE edition.

Sync Heterogeneous Databases: Four types of widely used databases (**MySQL, MS SQL Server, Oracle, DB2**) are supported by DIS to detect and fix data dissimilarities among them.

Testing Databases Connectivity: DIS provides capability to acknowledge connectivity between DIS and registered databases.

Hi-Speed Comparing and Repairing: Smart algorithm is used to compare and maintain a huge amount of data without effects on the performance of database operations.

Online Dissimilarity Fixing: It fixes all dissimilarities without any downtime for source or target database and with no effect on database availability, performance and online operations.

Display Result Details: Result details describe four categories to one of them verified records should belong. These categories are similar, missing in target, missing in source and dissimilar records.

Dissimilar Records
Source Record

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DEPARTMENT_ID	DEPARTMENT_NAME	LOCATION_ID	EMPLOYEE_ID
240	Recruiting	1700	
240	Government Sales	1700	
240	Government Sales	2400	
240	Government Sales	2400	

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Highlighting Dissimilar Values: In case of finding dissimilar records in result set, mismatched cells are highlighted in dissimilar detailed view.

Utilizing Store Results Options: Each job has its independent configuration to store results details which contains similar, missing in source, missing in target and dissimilar records.

Central Monitoring Page: Monitoring page enables user to monitor all queued or running jobs, display execution results details, errors or warning happened during execution and final status of verification **Synch, Not Synch** or **Fixed**.

Utilizing Fixing Dissimilarity Configuration: Multiple jobs can be created and use same comparing pair. However, each job is configured independently to fix missing in source, missing in target and dissimilar data.

Auto Purging Archived Data: Execution results are saved in metadata. These results can be removed automatically on regular basis and kept only if within configurable retention period.

Emailing Execution Results: Jobs can be scheduled to run automatically in specific time and execution result is sent to predetermined recipients list.

Multiple Repairing Methods: Selective methods are available to determine the way of fixing missing data. They vary from stop fixing missing data on source, target or both to add missing records in target from source and vice versa, as well as, update dissimilar data in target to be in synch with source values.

Comparing Pairs Validation: Before saving comparing pair definition which includes tables and columns to be involved in verification, DIS makes checks to validate number of comparative columns, columns data types and where condition syntax. In case of any difference in number of columns, comparing pair is not saved. Otherwise, if data types or length are dissimilar warning appears to highlight these mismatches.

Selective Rows and Columns: Verification process can be applied on selected rows, columns or both.

Several User Access Roles: Four user access roles are available in DIS according to each user job. Each user can have only one role such as Administrator, SuperUser, User or Operator.

Comparing Outside Database: The first step of verification process is caching data from source and target to be compared outside databases. This process avoids any bad effects on databases and online operations.

Logging Execution Steps: All essential validations, caching data, data comparison, fixing dissimilarity are logged and displayed immediately during job execution steps and can be retrieved from reports at any time.

Comparing Massive Amount of Data: Large amount of data can be verified because of smart algorithm that is used to compare and repair massive amount of data.

Web based application: Easy and interactive web interface is used to configure, operate, schedule and monitor all verification activities and progress.